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SQUASH VINE BORER

One of the most common insects attacking squash and related plants in the eastern United States is the squash vine borer Melittia satyrniformis. Calcium arsenate, either as a dust or a spray, may be used as a control for this pest. The spray should be prepared by mixing 4 pounds of calcium arsenate to 100 gallons of water, to which are added 8 pounds of hydrated lime. The dusting or spraying should be done thoroughly. The poison should be applied to all parts of the plant in order that the young larva on hatching from the egg will receive some of the poison as it bores into the stem. The arsenical treatments should begin at about the time that the first blossoms appear on the plant and continue at weekly or ten-day intervals, if they are to be effective. Applications should cease at least one month before harvest if the squash or pumpkins are to be marketed or consumed without washing, as later applications may leave residues on the mature product.

Work conducted by the Connecticut Agricultural Experiment Station indicates that satisfactory control can be obtained by using a nicotine sulfate spray, consisting of 40 per cent nicotine sulfate at a dilution of 1 gallon to 100 gallons of water, plus soap to the extent of 1/2 of one per cent of the dilute material. This material should be applied at weekly intervals, 4 times during the month of July, beginning about July 5 under Connecticut conditions. As egg-laying is earlier in many other sections, varying from April in the southern states to July in northern parts of the country, the time of beginning applications and the number required will vary with the locality. Both the upper and lower sides of the stems and leaves of the basal four feet of vines must be completely covered with the spray. The maintaining of a definite spray schedule is important, as the material is effective only against the eggs and the very young larvae just previous to boring into the stems and is not effective after the larvae have gained entrance to the stems.

In addition to spraying, other methods may be used to aid in controlling the vine borer. Recently, success has been reported through the use of pyrethrum extract injected by means of an oil can into the hole which is kept open by the borer. In small plantings it is feasible to destroy the borers after they have gotten into the vines by cutting the vine longitudinally so as not to sever it from the root stalk.



The growth of secondary roots should be encouraged by covering the stems with earth. All dead vines and old plants should be destroyed as soon as the crop is harvested. Every effort should be made to keep the plants in vigorous growing condition and free from other insects and disease.

#### TRUCK CROP AND GARDEN INSECT INVESTIGATIONS

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